

In the Claims

Claim 1 (original): A system comprising:

memory unit configured to be slidably received in a slot connector on a circuit board,
the memory unit including:

a card having a connector configured to mate with the slot connector;

a memory supported by the card;

circuit traces on the card extending from the connector of the card toward the
memory, the circuit traces being configured to couple the memory to a power supply via the
slot connector; and

an optical interface supported by the card and coupled to the memory, the
optical interface being configured to convert electrical signal to optical signals, for optical
data transmission to and from the memory; and

a processor coupled to the memory unit.

Claim 2 (original): A system in accordance with claim 1 and further comprising
circuit traces on the card between the optical interface and the memory.

Claim 3 (original): A system in accordance with claim 1 wherein the memory is
defined by an integrated circuit.

Claim 4 (original): A system in accordance with claim 1 wherein the optical interface
removably receives a fiber optic cable.

Claim 5 (original): A system in accordance with claim 1 wherein the optical interface further includes a fiber optic cable configured to mate with the optical interface without need for a tool.

Claim 6 (original): A method comprising:
assembling a memory unit configured to be slidably received in a slot connector on a circuit board by:

supporting a memory on a card having a connector configured to mate with the slot connector;

forming circuit traces on the card extending from the connector of the card toward the memory, the circuit traces being configured to couple the memory to a power supply via the slot connector; and

supporting an optical interface on the card and coupling the optical interface to the memory, the optical interface being configured to convert electrical signal to optical signals, for optical data transmission to and from the memory; and

coupling a processor to the memory.

Claim 7 (original): A method in accordance with claim 6 and further comprising forming circuit traces on the card between the optical interface and the memory.

Claim 8 (original): A method in accordance with claim 6 wherein supporting the memory comprises supporting a memory integrated circuit.

Claim 9 (original): A method of reconfiguring a system having a processor and an optical interface coupled to the processor, the method comprising:

coupling a memory to a first connector configured to mate with a slot connector of the system to couple the memory to a power supply;

coupling an optical interface to the memory, the optical interface being configured to convert between electrical signals and optical signals;

coupling the first connector to the slot connector; and

coupling an end of a fiber optic cable to the optical interface coupled to the memory and coupling another end of the fiber optic cable to the optical interface coupled to the processor.

Claim 10 (original): A method in accordance with claim 9 wherein the memory is a synchronous link type memory.

Claim 11 (original): A method in accordance with claim 9 wherein the memory is a synchronous link DRAM type memory.

Claim 12 (original): A method in accordance with claim 9 wherein the memory is a DRAM type memory.

Claim 13 (original): A method in accordance with claim 9 wherein the fiber optic cable is coupled to the memory by hand, without use of a tool.

Claim 14 (original): A system comprising:

- a memory;
- a processor coupled to the memory:
- an optical interface coupled to the memory, the optical interface being configured to convert electrical signal to optical signals, for optical data transmission to and from the memory; and
- conductors, separate from the optical interface, coupling the memory to a power supply.

Claim 15 (original): A system in accordance with claim 14 wherein the memory is defined by an integrated circuit.

Claim 16 (original): A system in accordance with claim 14 wherein the optical interface removably receives a fiber optic cable.

Claim 17 (original): A system in accordance with claim 16 wherein the optical interface further includes a fiber optic cable configured to mate with the optical interface without need for a tool.